

REMARKS

Reconsideration and allowance of the subject application are respectfully requested.

Claim 9 stands objected to with the Examiner requesting clarification what the claimed list refers to. The "list" in Claims 8 and 9 has been amended to refer to "the forbidden location area list." Claim 24 is canceled thereby rendering its objection moot.

Claims 23 and 26 stand rejected under 35 U.S.C. §102(e) as being anticipated by previously-applied Salmela et al. This rejection is respectfully traversed.

To establish that a claim is anticipated, the Examiner must point out where each and every limitation in the claim is found in a single prior art reference. *Scripps Clinic & Research Found. v. Genentec, Inc.*, 927 F.2d 1565 (Fed. Cir. 1991). Every limitation contained in the claims must be present in the reference, and if even one limitation is missing from the reference, then it does not anticipate the claim. *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565 (Fed. Cir. 1986). Salmela fails to satisfy this rigorous standard.

Claim 23 relates to a single message alone--a location updating message that is transmitted from a radio access network to the mobile terminal. In contrast, the Examiner's rejection relies upon fields extracted from a plurality of different messages. The Examiner identifies a first location updating message at column 10, line 2. Then the Examiner relies upon a second location updating rejection message at reference numeral 59 in Figure 5. Reference numeral 59 clearly refers to a message and not to a field within a message. See, for example, column 10, lines 64-66: "the mobile services switching center MSC forward this information to the mobile station MS in message 59." For the location area identification field, the Examiner relies on the LAI included in base station broadcast messages sent over broadcast channels as described in column 1. The broadcast message is neither a location updating message nor a

location updating rejection message. For the claimed mobile terminal identification field, the Examiner relies on the IMSI in column 6 which relates to "a service invocation message 31 to the intelligent network IN." See column 6, lines 21-22. So the Examiner relies on four different messages. But the fields recited in claim 23 all are included in a single location updating reject message. Lacking such a message with the specifically claimed fields, the Examiner's anticipation rejection is improper and should be withdrawn.

Claims 10, 12, 40, and 41 stand rejected under 35 U.S.C. §102(b) as being anticipated by newly-applied WO 95/07010 to Leih. This rejection is respectfully traversed.

Leih describes a mobile communication system with two domains A and B that overlap in an area C. Leih explains at column 2, lines 5-6 that "communication between a mobile station and a domain can therefore only be established if registration has taken place." Registration includes both the mobile station notifying the domain of its presence but also an indication that the domain is "available." Availability appears to mean that the mobile is within radio receiving range of the domain base station transmitter. See column 2, lines 15-16. Thus, it is possible within the overlap area C for a mobile station to communicate with either of the overlapping domains A and B. See page 2, lines 16-18. Different domains may offer different types of services, and the point of Leih's patent is to allow a user to select a domain to satisfy the user's service preference or particular call. See page 4, lines 3-5. For each user, a separate preference list is provided for each support's service. When a new domain is selected, the mobile station registers with selected domain performing a domain update. See page 11, lines 15-20.

Claim 10 recites "sending to the mobile radio terminal information indicating a list of the geographic coverage areas from which the mobile radio terminal may not request service."

Applicants have reviewed Leih and do not see where there is such a sending of a list from the

network to the mobile. Moreover, Leih's list only stores domains from which the mobile may request service.

Still further, Leih does not disclose "the mobile terminal uses the information to reduce signaling between the mobile terminal and the radio access network by not performing a geographic coverage area update procedure for a geographic coverage area included in the list." (Quoted from claim 10). A first embodiment, described in conjunction with Figure 2 of Leih, indicates that the preference lists are already present in the mobile station. See page 9, lines 11-12. In the second embodiment, described in conjunction with Figure 3, the preference lists are stored in the network. See page 10, lines 13-14. A review of Figure 3 and its accompanying description reveals no disclosure that the network sends a preference list to the mobile. Instead, "the network checks, on the basis of the preference list (stored therein)," whether the mobile station is still registered in the most-preferred domain. See page 10, lines 27-page 11, line 1.

The Examiner relies on domains D2 and D3 shown in Figure 2. Figure 2 relates to the first embodiment where the preference lists are stored in the mobile station. There is no transfer of those lists from the network to the mobile station. Regardless of embodiment, Leih's mobile station always performs a registration when it selects a new domain. In Figure 2, this is shown in that a domain update message is sent by the new domain D3 and also by the old domain D1 or D2. See page 10, lines 4-6. Whether or not that registration/domain update is made to a new domain has nothing to do whether the domain is on the preference list or not. If the mobile station selects a new domain that is on the list, it performs a domain update. There is no teaching or even suggestion that the mobile would not perform a domain update procedure if it selected a new domain area included in the preference list.

Lacking multiple features from independent claims 10 and 40, the anticipation rejection based upon Leih is improper and should be withdrawn.

Claims 1-4, 6-9, 13-22, 27, 28, 30-39, and 42-49 stand rejected under 35 U.S.C. §103 as being unpatentable based on the combination of Leih and Salmela. This rejection is respectfully traversed.

Leih does not disclose the mobile receives "from a radio access network information indicating a list of one or more geographic coverage areas from which the mobile radio terminal may not obtain service." As explained above, Leih has two embodiments. In one embodiment, the preference list is already present in the mobile station. See page 9, lines 11-12. In the other embodiment, the preference list is in the network and not provided to the mobile. See page 10, lines 13-14.

The Examiner turns to Salmela for this missing feature in Leih. List 10 referred to at column 10, lines 1-3 relates to a special list of cells offering a special service for the subscriber by the network. But the list 10 provided by the network does not include forbidden cells. While there are forbidden cells specified in the network, the list 10 itself provided by the network to the mobile only comprises allowable cells. This is the reason that the mobile must always request a location update in Salmela. If the location area update happens to be in a forbidden cell, as determined by the network, the network responds with a location update rejection message. See column 10, lines 62-66 and column 11, lines 14-46.

The Examiner contends that Leih teaches the checking step of claim 1 and refers to times t1 and t2 in Figure 2. At time t1, the mobile that is receiving signals from both domain D1 and D2. On the basis of these signals, the mobile determines which domains are successful. See page 9, lines 20-22. At time t2, signals are received from all three domains D1-D3. When the

signals are received from domain D3, the mobile checks the list for preferences. In contrast, independent claims 1 and 32 recite that the list indicates one or more geographic coverage areas from which the mobile radio terminal may not obtain service. Leih's preference list only envisions domains in which the mobile radio terminal may obtain service. This is a significantly different approach. Leih simply assumes that all domains encountered by the mobile are permitted. The question for Leih is simply whether or not that particular domain provides the service preferred by the mobile subscriber.

Claim 27 even further defines that the list includes forbidden location areas. The Examiner admits that Leih does not disclose this feature but relies on Salmela at column 11, lines 5-20. The Examiner is requested to reconsider Salmela's teachings at columns 10 and 11. Here, Salmela indicates that the special list of cells does not include forbidden cells. Rather, forbidden cells are specified within the network and not within the mobile. The mobile requests a location update, ignorant of whether the cell is forbidden or not, and the network determines for itself that the cell is forbidden for this particular mobile. The network then sends a location area rejection message to that mobile in response to the location area request. There is no disclosure or suggestion in Salmela of the mobile receiving a list of forbidden cells or that the mobile may choose on its own whether to perform/request a location area update based on a forbidden cell list.

Thus, even if the combination of Leih and Salmela could be made as proposed by the Examiner, that combination fails to disclose a list of one or more geographic coverage areas from which the mobile radio terminal may not obtain service being received by the mobile radio so that the mobile radio can determine whether to perform a location area update. Moreover, in any obviousness inquiry, it is important to consider the nature of the problem solved by the

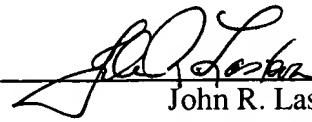
claimed invention. The present invention eliminates unnecessary location updates for both idle and connected mobile radio terminals. In contrast, Salmela states that the problem Salmela is addressing is to provide "tailored special services to which other mobile stations are not entitled for individual mobile stations." Column 3, lines 4-6. Contrary to the primary objective of the present invention, Salmela's invention is founded on the fact that the mobile station always performs a location update procedure--regardless of whether that mobile station can connect to a particular cell or not. The location of update procedure is uniformly performed, and always starts with the mobile station sending location area update message to the MSC via radio access network. See, for example, Figures 2-5 and column 5, lines 64-column 6, line 5. Thus, Salmela's approach of having mobiles always sending location updates teaches away from the objective of the claimed invention. That teaching away is further evidence of non-obviousness.

The application is in condition for allowance. An early notice to that effect is earnestly solicited.

Respectfully submitted,

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